

REMARKS

The Examiner is thanked for the thorough examination of the present application, and the indication that claims 2, 3, 5-10, 12-22, and 25-28 contain allowable subject matter. The Office Action, however, tentatively rejected the remaining claims. Claim 3 has been amended herein. Applicants respectfully request reconsideration and withdrawal of the rejections for at least the reasons set forth herein.

Objection to claim 3

The Office Action objected to claim 3 for certain informalities. Applicants have amended claim 3 to address and overcome these informalities. Therefore, Applicants request that the objection to claim 3 be withdrawn.

Rejections Under 35 U.S.C. 102(b) of Claims 1,4,5,9-11,23,24,29 and 33-35

Turning now to the substantive rejections, claims 1, 4, 5, 9-11, 23, 24, 29 and 33-35 were rejected under 35 U.S.C. 102(b) as allegedly unpatentable by Hsia et al (USPN 6426555, hereinafter "Hsia"). Claim 1 is an independent claim, from which claims 4, 5, 9-11, 23, 24, 29 and 33-35 depend. Applicants submit that claim 1 is patentable for at least the reasons discussed below, and therefore for at least the same reasons claims 4, 5, 9-11, 23, 24, 29 and 33-35 are patentable.

The Office Action alleged that Hsia teaches the bonding pad structure as claims 1, 4, 5, 9-11, 23, 24, 29 and 33-35. Applicants respectfully disagree.

Independent claim 1 recites:

1. A bonding pad structure, comprising:
a substrate having a bonding region and a sensing region;
a first dielectric layer formed overlying the substrate and having a dielectric island surrounded by a ring-shaped trench;

a first conductive layer formed in the ring-shaped trench of the first dielectric layer;
a passivation layer formed overlying the first dielectric layer and having an opening, wherein the opening corresponds to the bonding region and the sensing region and exposes the dielectric island and a part of the first conductive layer; and
a second conductive layer covering the opening of the passivation layer and electrically connected to the first conductive layer.

(Emphasis Added).

Claim 1 expressly defines a bonding pad structure that comprises a passivation layer formed overlying the first dielectric layer and having an opening to **expose the first dielectric layer and a part of the first conductive layer**. This structure is not disclosed in Hsia.

In this regard, Hsia in column 3, lines 45-48, discloses:

As in the first embodiment, all the small via holes extend downwards from the top surface of the passivation layer, i.e through layers 44,43 and 42, to expose the metal that fill hollow square 54.

FIGS. 5 and 7 in Hsia show the passivation layer has openings (e.g., via holes) to expose the metal layer 54, but the openings **do not expose the dielectric layer 15**. Accordingly, it is clear that the bonding pad structure of the claimed embodiments is apparently different from the bonding pad structure in Hsia since the via holes in the passivation layer (42, 43, 44) do not expose the dielectric layer 15. For at least this reason, the rejections should be reconsidered and withdrawn.

Hence it is respectfully submitted that claim 1 is allowable over the cited reference (Hsia et al). Insofar as claims 4, 5, 9-11, 23, 24, 29 and 33-35 depend from claim 1, these claims are also allowable by virtue of their dependency on claim 1.

Rejections Under 35 U.S.C. 103(a) of Claims 30-32

Insofar as claims 30-32 depend from claim 1, these claims are also allowable by virtue of their dependency.

Reconsideration of the rejection of claims 30-32 is hereby respectfully requested.

No fee is believed to be due in connection with this amendment and response. If, however, any fee is deemed to be payable, you are hereby authorized to charge any such fee to Deposit Account No. 20-0778.

Respectfully submitted,



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